26 March 2021

Dr. Caroline Good Office of Protected Resources National Marine Fisheries Service 1315 East-West Highway, 13th Floor Silver Spring, Maryland 20910

Dear Dr. Good:

The Marine Mammal Commission (the Commission) continues to be extremely concerned about the status of the North Atlantic right whale (*Eubalaena glacialis*), and commends the National Marine Fisheries Service (NMFS) on its efforts to evaluate the effectiveness of the various measures and programs in place to reduce serious injury and mortality of the species. These efforts, including the current evaluation of the effectiveness of the 2008 vessel speed rule and the identification of areas for improvement, are necessary to address the alarming decline of the right whale population that has occurred since 2010. The Commission, in consultation with its Committee of Scientific Advisors, has reviewed the June 2020 "North Atlantic Right Whale (*Eubalaena glacialis*) Vessel Speed Rule Assessment" report (the report), and provides the following comments and recommendations.

NMFS implemented a vessel speed rule (the rule) (73 Fed. Reg. 60173) in 2008 to mitigate the risk of vessel strikes to North Atlantic right whales along the U.S. East Coast. The rule required vessels 65 feet and longer to transit designated areas at a speed of 10 knots or less. NMFS designated ten seasonal management areas (SMAs) between Massachusetts and Florida, with seasonally active periods reflecting right whale habitat use throughout the year. SMA designation was informed by data on right whale distribution and vessel traffic. NMFS also implemented a voluntary dynamic management area (DMA) program. When right whale foraging aggregations of three or more individuals are observed outside the boundary of an active SMA, a DMA is established for 15 days. Vessels are asked to transit the DMA at a speed of less than 10 knots or to avoid the area. Vessels less than 65 feet in length (small vessels) are not subject to the speed rule in either SMAs or DMAs.

Background

The report reviews and synthesizes many aspects of the effectiveness of the vessel speed rule, including the increasing use of speed limits to protect whales in other parts of the United States and around the world, volume of traffic and regulated vessel compliance with speed regulations in SMAs and DMAs, volume of non-regulated small-vessel traffic, effectiveness of the rule in reducing the number of serious injuries and deaths, vessel sizes involved in strikes of right whales, navigational safety, economic impacts, enforcement, and outreach.

Encouragingly, mariner compliance with SMA regulations increased from 53 percent soon after implementation of the rule, to 81 percent during 2018-2019. However, much lower levels of

compliance in the Southeast,¹ especially by large ocean-going vessels in port entrance areas,² are a cause for considerable concern. The rule allows for deviations from the speed restrictions due to safety concerns, but the navigational safety assessment concluded that the lack of compliance by ocean-going vessels in port entrance channels was likely not due to, or justified by, safety deviations. Groundings have not increased since the rule was enacted, and, at the Charleston, SC entrance channel, for example, conditions requiring increased speeds for safety reasons were rare; only 13 percent of transits involved two-way Post-Panamax traffic and fewer than 3 percent of wind speed observations exceeded 30 knots. Although there was some evidence of vessels slowing during transits through the North Carolina to Georgia SMA, it is clear that there has been minimal attention to, or compliance with, the speed rule in that SMA.

The report documented a decline in right whale deaths from 10 in the ten years immediately before implementation to four whales in the ten years immediately following implementation, but an increase in serious and non-serious injuries from two to four and 13 to 24, respectively. The report also documented an increase in vessel strikes of other large whale species since the rule was implemented, although it states that the increase may have been partly the result of increased surveillance and reporting, as well as an increase in the humpback whale population (leading to an increased vessel-whale encounter rate). Vessel strikes have continued to occur in the Northeast, despite relatively high compliance with SMA regulations. Although the rule places speed restrictions only on vessels greater than 65 feet in length (large vessels), which are assumed to represent the greatest threat, Knowlton and Costidis (2013) found that between 1999 and 2012, at least 11 vessel strikes of right whales (61 percent of cases analyzed) were by small vessels.

Prompt revision of the vessel speed rule

The assessment of the vessel speed rule clearly demonstrates deficiencies in several aspects of the rule and its implementation that need to be rectified urgently to further reduce risk to right whales. While known vessel-strike deaths decreased following the implementation of the rule, this may not represent a truly declining mortality rate; the large majority (64 percent) of right whale deaths are cryptic (i.e., undetected or unreported) and the number of known deaths is a very poor predictor of total deaths (Pace et al. 2021). In addition, serious and non-serious injuries from vessel strikes have been increasing. The sub-lethal effects of vessel strikes are still largely unknown but likely have significant impacts on the health of individuals and potentially on the population's ability to recover. It is also clear that documented compliance levels are far from adequate, particularly for ocean-going vessels in the Southeast, where the considerable risk to right whales, especially pregnant females migrating south and mothers with their newborn calves on the calving grounds and during their migration north, remains. In light of the ongoing and alarming right whale population decline since 2010, and the areas for needed improvement that are clearly identified in the report, the Commission recommends that NMFS proceed directly to rulemaking to address identified inadequacies and improve vessel-strike protections for North Atlantic right whales. We include recommendations for specific improvements below.

¹ E.g., 69 percent in the North Carolina to Georgia SMA

² E.g., only 13 percent off Brunswick, GA

Modify SMAs

The Commission concurs with NMFS's recommendation to modify existing SMAs and establish new ones. Given what is known about changing right whale distribution in response to climate change and predicted changes in vessel traffic and prey distribution in the Northeast as offshore wind energy industrial development continues, the temporal and spatial extent of existing SMAs needs to be reassessed, and a comprehensive analysis of DMAs is needed to inform expansion of current SMAs and the designation of new SMAs. Figure 51 in the report depicts a subset of DMAs declared between 2010 and 2019. Based on this figure, the Commission recommends that a new SMA be established south of Martha's Vineyard and Nantucket, and that areas in the Gulf of Maine which historically have had the largest numbers of DMA designations (e.g., near Jeffreys Ledge) also be considered for designation. Fewer but larger SMAs rather than many smaller areas would likely be preferable to the shipping industry. Other options to consider in future rulemaking should include expanded or additional mandatory ship reporting (MSR) areas, as well as reconsideration of the 10-knot speed threshold (Kelley et al., 2020). The Commission agrees on the need to assess how to further reduce vessel-strike risk in Cape Cod Bay, and recommends reassessment of risk on the calving grounds, given that one serious injury and one calf death due to a vessel strike have occurred during the past two years.

Enhance Monitoring and Enforcement

Although the relatively high overall compliance with SMA speed restrictions (81 percent) is encouraging, improvements have ceased and compliance in the Southeast remains poor. Excessive speeds of ocean-going vessels approaching and departing ports in the Mid-Atlantic and Southeast regions are of great concern because of the presence of migrating right whales and mother—calf pairs on the nursery grounds. A 2019 U.S. Army Corps of Engineers study cited in the report and a more recent Maritime Whale AIS (Automatic Identifications System) analysis (Lang et al. 2020) make it clear that the excessive speeds documented outside Mid-Atlantic and Southeast ports indicate a disregard for the speed restrictions, and are not due to safety concerns. The Commission concurs that methods to document safety deviations with verifiable data should be explored and that targeted enforcement and outreach to the industry and pilots should be undertaken, and recommends that NMFS coordinate with Transport Canada on vessel speed requirements, modifications, and lessons learned.

The Commission supports real-time monitoring, analysis, and compliance reporting for ports of concern when SMAs are in effect. An example of such work is that being undertaken by the Rhode Island Marine Animal Support (RIMAS) Maritime Whale project, initially at the Block Island Seasonal Management Area, and recently at the ports of Charleston, SC and Savannah, GA. Real-time monitoring data should be provided to enforcement agents, port authorities, and pilot associations. This will increase awareness of whale presence and vessel-strike risk, and will support a needed increase in enforcement and issuance of citations. Increased funding for outreach, right whale monitoring, ship surveillance, and enforcement would significantly aid these efforts.

Significantly Increase Outreach and Communication

The Commission commends the numerous outreach efforts by NMFS and its partners to promote mariner awareness, cooperation, and compliance, but agrees that more needs to be done to increase compliance with, and effectiveness of, the vessel speed rule. Currently, operators using multiple ports are subjected to observation and enforcement in some ports but not in others with

equally or more stringent vessel speed limits. Like motorists cognizant of the presence of motor vehicle speed enforcement zones and cameras, shipping companies, vessel operators, and port pilots are aware of where SMAs and DMAs are and where enforcement is strict or lax, so they likely slow down when the risk of being caught is high. In addition to the obvious need for stepped-up enforcement, voluntary programs, which rely on report cards and corporate responsibility incentives and have been effective and well-received by the shipping industry, should be further employed. NOAA (National Oceanic and Atmospheric Administration) and NMFS offices lead or partner in several of these programs. The Commission recommends that NOAA expand the reach of these programs to more ports, increase the communication between ports to standardize the use of compliance "report cards" for all operators, and consider consolidating the corporate responsibility programs at U.S. ports into one program. Specifically, the East Coast's Right Whale Corporate Responsibility Project could be expanded to all ports on the East Coast, beginning with the ports in the Mid-Atlantic. The West Coast's Protecting Blue Whales and Blue Skies program provides financial and public relations incentives to shipping companies that comply with voluntary speed limits, and has had success implementing reduced speed regulations that provide increased protection of whales from vessel strikes as well as reduced emissions that decrease air pollution. Similar to New York and New Jersey's Clean Vessel Incentive, NMFS could work with other federal and state authorities on the East Coast to use speed restrictions to reduce vessel-strike risk to right whales, to meet emission standards that reduce pollution, and/or to consolidate greenhouse gas controls into a single corporate responsibility program.

Targeted outreach efforts toward small-vessel operators should also be implemented, regardless of whether speed rules are applied to smaller vessel classes. Awareness of whale presence and risk of vessel strike should prompt recreational mariners to operate more safely. Inclusion of all vessel operators in NMFS's SMA email distribution list and widespread promotion of the Whale Alert app would be a starting point.

Evaluation and management of all aspects of implementation of the vessel-speed rule is supported by the survey and monitoring efforts of Federal, state, and non-governmental scientific institutions along the U.S. eastern seaboard. The Commission commends these groups for providing real-time sightings and effort data in a comprehensive display to inform managers and the public, and appreciates the risks involved in conducting this important work. During aerial surveys to monitor whale presence, field crews identify aggregations that trigger DMA implementation, and rapidly communicate whale-sighting locations through email distribution lists and other means. Access to information in real-time has proven essential to our understanding of seasonal, annual, and long-term whale distribution and movements. The Commission strongly encourages continued and strengthened support for these efforts and for enhanced communication between regions. Rapid sharing of aerial survey reports allows real-time response to whale presence in the form of alerts to operators of vessels of all sizes, enforcement, and media stories to raise public awareness.

Address Vessel-Strike Risk from Small Vessels

The data presented in this report show that strikes of right whales by small vessels can result in serious injury and death, in addition to creating the potential for long-lasting negative effects from injuries that have been classified as "non-serious". As noted above, between 1999 and 2012, a minimum of 11 right whale vessel strikes (61 percent of cases analyzed) were by small vessels, and at least two calf deaths have been attributed to small vessels in recent years. Further, the injury risk to humans is also greater on small vessels. The report, documenting the behavior of AIS-equipped

small vessels,³ found that in New England small vessels were traveling at speeds less than 10 knots in 83 percent of SMA transits, in the Mid-Atlantic in less than 50 percent, and in the Southeast 55-74 percent.

In light of these findings, the Commission recommends that NMFS expand speed restrictions to small vessels, especially in Southeast SMAs with right whale calving habitat, where the presence of small vessels and the behavior of females and their calves puts the whales at greater risk. In addition, the Commission recommends that NMFS review the example of state-level speed restrictions in place for small vessels in Massachusetts waters and consider their applicability to other regions.

Regulation, monitoring, and enforcement of small vessels is challenging but it is inescapable that they cause right whale deaths and serious injuries. Given the increase in affordability of AIS technology and its increasing use on small vessels, the Commission recommends that NMFS consult with the U.S. Coast Guard as it considers requiring AIS on Class III (40-65 feet in length), and potentially Class II (26-40 feet in length) vessels, operating in North Atlantic right whale SMAs.

Modify or Terminate the DMA Program

The report illustrates the nearly complete lack of compliance with the voluntary DMA speed regulations, and suggests that the low level of cooperation by mariners is preventing the significant risk reduction that the DMAs were designed to provide. While compliance in these areas may be low, the DMA program still alerts mariners to areas with recurring right whale presence, and therefore, the Commission concurs with NMFS's recommendation to modify, not terminate, the DMA program. Specifically, the Commission urges NMFS to consider making speed restrictions in DMAs mandatory, and increase monitoring frequency, which could allow for DMAs to be smaller and more mobile. Expanded use of acoustic technology to trigger DMAs could enhance the agency's ability to designate protective areas in a timely manner. Similarly, given the high-risk behavior of mothers and calves described in the report, as well as the high conservation value of breeding females, NMFS should consider expanding DMA declaration triggers to include presence of even just one mother-calf pair.

The Commission appreciates the opportunity to work closely with NMFS on the issue of preventing vessel strikes of large whales. The Commission's research grant program has funded several projects in recent years focused on vessel-strike reduction on the east and west coasts. We will continue to provide additional recommendations and input on this issue and look forward to continued dialog between our agencies on the issue of reducing vessel speeds and vessel-strike risk. We welcome the opportunity to meet in the near future as NMFS considers options for revising and strengthening the rule. In this context, the Commission is interested in exploring a workshop with east-coast and west-coast experts from the U.S. and Canada that would address vessel-strike issues, the design of SMAs and DMAs, communication and outreach, and public-private partnerships with the involved industries.

³ Currently, AIS is not required for vessels less than 65 feet in length.

The Commission is available to answer any questions about these comments and recommendations.

Sincerely,

Peter O. Thomas, PhD., Executive Director

Peter o Thomas

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